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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|---------------|----------------------|-------------------------|------------------|
| 09/540,201 | 03/31/2000 | Otmar Bitsche | 225/48731 | 3629 |
| 759 | 90 07/23/2002 | | | |
| Evenson McKeown Edwards & Lenahan PLLC 1200 G Street N W Suite 700 Washington, DC 20005 | | | EXAMINER | |
| | | | LAM, THANH | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2834 | |
| | | | DATE MAILED, 07/22/2002 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No. **09/540,201**

Applicant(s)

Bitsche et al.

Examiner

Thanh Lam

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| The MAILING DATE of this communication appears on the cover sheet with the correspondence address | | | | |
|---|---|--|--|--|
| Period for Reply | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. | | | | |
| Extensions of time may be available under the provisions of 37 CFR 1.136 (a). mailing date of this communication. | In no event, however, may a reply be timely filed after SIX (6) MONTHS from the | | | |
| If the period for reply specified ebove is less than thirty (30) days, a reply within If NO period for reply is specified ebove, the meximum stetutory period will epply Feilure to reply within the set or extended period for reply will, by statute, ceuse Any reply received by the Office leter then three months efter the meiling dete of eerned petent term adjustment. See 37 CFR 1.704(b). | vand will expire SIX (6) MONTHS from the meiling dete of this communication. the application to become ABANDONED (35 U.S.C. § 133). | | | |
| Status | | | | |
| 1) Responsive to communication(s) filed on | · | | | |
| 2a) ☐ This action is FINAL . 2b) 💢 This action | ction is non-final. | | | |
| 3) \square Since this application is in condition for allowance closed in accordance with the practice under $Ex\ p$ | except for formal matters, prosecution as to the merits is earte Quayle, 1935 C.D. 11; 453 O.G. 213. | | | |
| Disposition of Claims | | | | |
| 4) 💢 Claim(s) <u>1-10</u> | is/are pending in the application. | | | |
| 4a) Of the above, claim(s) | is/are withdrawn from consideration. | | | |
| 5) Claim(s) | is/are allowed. | | | |
| 6) 🛛 Claim(s) <u>1-10</u> | is/are rejected. | | | |
| 7) Claim(s) | is/are objected to. | | | |
| 8) Claims | are subject to restriction and/or election requirement. | | | |
| Application Papers | | | | |
| 9) \square The specification is objected to by the Examiner. | | | | |
| 10) The drawing(s) filed onis/ar | e a) \square accepted or b) \square objected to by the Examiner. | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | |
| 11) The proposed drawing correction filed on | is: a) \square approved b) \square disapproved by the Examiner. | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | |
| 12) The oath or declaration is objected to by the Exam | niner. | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | |
| 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | |
| a) ☐ All b) ☐ Some* c) ☐ None of: | | | | |
| 1. \square Certified copies of the priority documents ha | | | | |
| 2. Certified copies of the priority documents ha | ve been received in Application No | | | |
| application from the International Bur | | | | |
| *See the attached detailed Office action for a list of t | | | | |
| 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). | | | | |
| a) The translation of the foreign language provisional application has been received. | | | | |
| 15) Acknowledgement is made of a claim for domesti | c priority under 35 U.S.C. §§ 120 and/or 121. | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) [] () () () () () () () () () (| | | |
| 2) Notice of Draftsperson's Petent Drawing Review (PTO-948) | 4) Interview Summery (PTO-413) Paper No(s). 5) Notice of Informal Petent Application (PTO-152) | | | |
| 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6) Other: | | | | |
| | 5, 5.1M1 | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Carpenter.

Regarding claim 9, Carpenter discloses a reluctance motor having a motor and at least two salient stator poles (18, 19) with each of said stator poles being provided with an exciter coil (16), said reluctance motor further comprising at least one biasing mean (24) positioned against an end of each of said exciter coils which faces said rotor to apply a radial force to said exciter coils in a direction away from said rotor.

Regarding claim 10. Carpenter discloses said biasing means is a snap ring.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

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to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Capenter in view of Wuerth et al.

Carpenter discloses a reluctance motor comprising: a rotor and at least two salient stator poles wherein each of said stator poles (18,19) has an exciter coil (16, 17) surrounding respective stator poles with one end of each of said exciter coils facing said rotor (12).

Wuerth et al. disclose a spring biasing device (20) contacting said end of each of said exciter coils (60) facing said rotor wherein said spring biasing device provides a radially outward force on the ends of said exciter coils facing said rotor in a direction away from said rotor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stator of Carpenter to accommodate the spring bias device as taught by Wuerth in order to prevent the coils from crack.

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Regarding claim 2, the proposal in combination of Carpenter and Wuerth disclose said spring biasing device is at least one snap ring.

Regarding claim 3, the proposal in combination of Carpenter and Wuerth disclose said exciter coils are gripped between the spring biasing device and a yoke of the stator.

Regarding claim 4, the proposal in combination of Carpenter and Wuerth disclose each of said stator poles has a groove in at proximately the center of the end facing the rotor wherein said groove receives said spring biasing device.

Regarding claim 5, the proposal in combination of Carpenter and Wuerth disclose in the axial direction of a yoke of the stator, at each end of the stator poles, an outwardly springing one of said at least one snap springs contacts the ends of the exciter coils facing the rotor.

Regarding claim 6, the proposal in combination of Carpenter and Wuerth disclose each of said at least one snap ring is disposed of one flat side adjacent said stator poles.

Regarding claim 7, the proposal in combination of Carpenter and Wuerth disclose each of said at least one snap ring is made of spring steel.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter in view of Nakahara et al.

Carpenter discloses a method for the manufacture of a stator of a reluctance motor having at least two salient stator poles each provided with an exciter winding, said method comprising the acts of: assembling sheet iron laminations of the stator; disposing exciter

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windings on the assembled sheet iron laminations; applying at least one snap ring to ends of

exciter coils facing away from a yoke of the stator.

Nakahara et al. disclose an applying casting resin to the exciter coils and interstices

between the exciter coils; and curing the casting resin.

It would have been obvious to one of ordinary skill in the art at the time the invention was

made to modify the stator of Carpenter to accommodate the as taught an applying casting resin by

Nakahara et al. in order to provide the coils with ease to assembly.

6. In view of the Appeal brief filed on 5/21/2002, PROSECUTION IS HEREBY

REOPENED. The new ground rejection as set forth above.

To avoid abandonment of the application, appellant must exercise one of the following

two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37

CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a

supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or

other evidence are permitted. See 37 CFR 1.193(b)(2).

7. The finality of the rejection of the last Office action is persuasive and, therefore, the

finality of that action is withdrawn.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

Thanh Lam

Patent Examiner

July 19, 2002